

Search History

Today's Date: 9/23/2000

DB Name	<u>Query</u>	Hit Count Set Name	
USPT,JPAB,EPAB,DWPI,TDBD	110 not 18	12	<u>L11</u>
USPT,JPAB,EPAB,DWPI,TDBD	17 same 19	15	<u>L10</u>
USPT,JPAB,EPAB,DWPI,TDBD	particle near3 size	272410	<u>L9</u>
USPT,JPAB,EPAB,DWPI,TDBD	16 same 17	3	<u>L8</u>
USPT,JPAB,EPAB,DWPI,TDBD	chang\$4 near3 slope	8643	<u>L7</u>
USPT,JPAB,EPAB,DWPI,TDBD	particle near3 size near3 distribution	33527	<u>L6</u>
USPT,JPAB,EPAB,DWPI,TDBD	13 and 14	292	<u>L5</u>
USPT,JPAB,EPAB,DWPI,TDBD	((356/\$)!.CCLS.)	67156	<u>L4</u>
USPT,JPAB,EPAB,DWPI,TDBD	11 and 12	1298	<u>L3</u>
USPT,JPAB,EPAB,DWPI,TDBD	different near3 wavelengths	30998	<u>L2</u>
USPT,JPAB,EPAB,DWPI,TDBD	slope near3 chang\$4 particle near3 size	280766	<u>L1</u>

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L8: Entry 3 of 3

File: DWPI

Nov 4, 1999

DERWENT-ACC-NO: 1999-634336

DERWENT-WEEK: 199954

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TITLE: Chemical-mechanical planarization slurry quality control method for measuring slurry particle size distribution in semiconductor and optics industries

INVENTOR: CERNI, T A; KNOWLTON, D; WAISANEN, S

PATENT-ASSIGNEE:

ASSIGNEE CODE
PARTICLE MEASURING SYST PARTN

PRIORITY-DATA:

1998US-0069682 April 29, 1998

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES MAIN-IPC
WO 9956106 A1 November 4, 1999 E 054 G01N015/02

DESIGNATED-STATES: JP AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

APPLICATION-DATA:

PUB-NO APPL-DATE APPL-NO APPL-DESCRIPTOR

WO 9956106A1 April 22, 1999 1999WO-US08476 N/A

INT-CL (IPC): G01N 15/02

ABSTRACTED-PUB-NO: WO 9956106A

BASIC-ABSTRACT:

NOVELTY - A tungsten lamp (1214a,1214b,1214n) irradiates ultraviolet radiation towards a chemical-mechanical planarization slurry, passed through a sample cell (1208a,1208b,1208q). A detector (1220a,1220b,1220n) detects the transmission of radiation through the sample. A computer (1220) interprets the detector signals and determines the transmission value as a function of wavelength.

DETAILED DESCRIPTION - The slope of transmission is determined as a function of wavelength over time and the change in slope indicates the change in the particle size distribution, which may be 0.03-1.0 micro m or may be above 1 micro m.

An INDEPENDENT CLAIM is also included for a chemical-mechanical planarization slurry quality evaluating system.

USE - For measuring slurry particle size distribution in semiconductor and optics industries.

ADVANTAGE - Enables detection of changes in particle size distribution independently from changes in particle size concentration, in real-time.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of a

chemical-mechanical planarization slurry quality control system.

Sample cell 1208a,1208b,1208q

Tungsten lamp 1214a,1214b,1214n

Computer 1220

Detector 1220a,1220b,1220n

ABSTRACTED-PUB-NO: WO 9956106A

EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.12/14

DERWENT-CLASS: S03 U11

EPI-CODES: S03-E04B1A; S03-F05C; U11-C06A1A; U11-F01B1; U11-F01B9;